Remarks

The Office Action of October 29, 2008, has been carefully reviewed and these remarks are responsive thereto. In the Office Action, claims 1-38 were pending. Upon entry of the present paper, claims 24-38 are canceled without prejudice or disclaimer, and new claims 39-60 are added. No new matter is introduced by these claims, as support can be found, among other places, at pages 3-6 of the specification.

The Office Action's rejections are as follows:

- Claims 1-6, 12-14, 24-27, and 33-35 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Chapman et al. (US 7,324,515), hereinafter Chapman.
- Claims 7-11, 18-23, and 36-38 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Chapman and further in view of Abramson et al. (US 2003/0120819), hereinafter Abramson.
- Claims 15-16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Chapman and further in view of Nikolich et al. (US 6,853,680), hereinafter Nikolich, and further in view of Ma et al. (US 2005/0177861), hereinafter Ma.
- Claims 17, 28-29, and 31-32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Chapman and further in view of Chapman et al. (US 7,349,430), hereinafter Chapman B.

Independent Claim 1 and Dependent Claims 2-17

Claim 1 recites the following feature:

a gateway configured to output signals on at least two types of data tunnels for transfer over a cable network to Customer Premises Equipment (CPE), each data tunnel characterized as a one-way data stream of out-of-band (OOB) messaging signals, where each type of data tunnel is associated with a different type of OOB messaging signals such that different types of data tunnels transfer different types of OOB messages.

The Office Action alleges that Chapman teaches this element of claim 1 and refers to

Figure 1, column 6 (lines 52-55), and column 3 (lines 1-4) to make this allegation. Chapman discloses a method for transmitting data over a cable network wherein a tunnel is established in the cable network and data packets are sent from a cable modem termination system (CMTS) through the tunnel to clients. The tunnels of Chapman are generic tunnels; Chapman does not disclose "different types of data tunnels transfer different types of OOB messages." While "there can be different addressing schemes used for sending different OOB messages over different Ethernet tunnels," Chapman only discloses "different lookup tables 106-112" to "determine where and how to forward OOB packets." (See Chapman, column 6, Il. 51-56) These lookup tables contain different destination IP and Ethernet address schemes but do not contain schemes that allow for "each type of data tunnel is associated with a different type of OOB messaging signals such that different types of data tunnels transfer different types of OOB messages."

None of the cited references (e.g. Chapman, Abramson, Ma, Nikolich, and ChapmanB) overcome these deficiencies, and for at least these reasons, Applicant submits that independent claim 1 distinguishes over the references of record and is in condition for allowance. Claims 2-17 depend from claim 1 and are distinguishable for at least the same reasons as claim 1, and further in view of the various features recited therein.

Independent Claim 18 and Dependent Claims 19-23

Claim 18 recites, inter alia, the following feature:

a plurality of output ports for transferring the OOB messaging signals from the gateway to the cable network, wherein each output port is capable of transferring different OOB messaging signals.

For reasons similar to those given above for claim 1, neither Chapman nor any of the secondary references teach this feature of claim 18. For at least these reasons, Applicant submits that independent claim 18 distinguishes over the references of record and is in condition for allowance. Claims 19-23 depend from claim 18 and are distinguishable for at least the same reasons as claim 18, and further in view of the various features recited therein.

Claims 24-38

Claims 24-38 have been canceled, thus rendering their rejections moot.

New Independent Claim 39 and Dependent Claims 40-46

New independent claim 39 recites, among other features, the following:

transmitting the data services information, out-of-band signals, and application data on two-way output channels and a plurality of different types of one-way output data tunnels, each different type of out-of-band signal sent on a different type of data tunnel

For reasons similar to those given above for claim 1, neither Chapman nor any of the secondary references teach this feature of claim 39. For at least these reasons, Applicant submits that new independent claim 39 distinguishes over the references of record and is in condition for allowance. Claims 40-46 depend from claim 39 and are distinguishable for at least the same reasons as claim 39, and further in view of the various features recited therein.

New Independent Claims 47, 53, 59, and 60 and their dependent claims

New independent claims 47, 53, 59, and 60 have features similar to those of claim 1 discussed above. Therefore, the Applicant believes that claims 47, 53, 59, and 60 are in condition for allowance for at least similar reasons given in support of claim 1. Dependent claims 48-52 and 54-58 depend on one of these independent claims and are in condition for allowance at least due to their dependence on an allowable claim as well as the features they recite.

Amendment Dated 1/29/2009 Response to Office Action Dated 10/29/2008

Conclusion

All objections and rejections have been addressed. Hence, it is respectfully submitted that the present application is in condition for allowance, and a notice to that effect is earnestly solicited.

Respectfully submitted,

Date: January 29, 2009

William J. Allen

Registration No. 31,393 10 S. Wacker Dr., Suite 3000 Chicago, IL 60606

Tel: (312) 463-5000 Fax: (312) 463-5001